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10/541,560	07/06/2005	Stefan Breuer	PHDE030002US	5826

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PHILIPS INTELLECTUAL PROPERTY & STANDARDS
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EXAMINER	
NAQI, SHARICK	

ART UNIT	PAPER NUMBER
3769	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/541,560	BREUER ET AL.	
	Examiner	Art Unit	
	SHARICK NAQI	3769	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *10/17/2008*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *3,8 and 10-21* is/are pending in the application.

4a) Of the above claim(s) *18-19* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *3,8,10-17,20 and 21* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

The Examiner acknowledges the response filed October 17, 2008. The finality of the Office Action mailed on August 21, 2008 is hereby withdrawn.

Election/Restrictions

Applicant's arguments regarding the incorrect grouping of claims 17 and 21 with the non-elected are hereby deemed persuasive. Examiner agrees with the applicant's assertion that pending claims 3, 8, 10-17 and 20-21 read on elected species 2 and claims 18-19 are withdrawn from consideration for being drawn to the unelected species. Examiner's actions have rendered moot the petition for a decision that claims 17 and 21 read on the elected species. Claims 3, 8, 10-17 and 20-21 have been examined.

Note to Applicant regarding Claim Interpretation

In regard to limitations claiming the software for switching modes and the means for recognizing that corresponds to software, Applicant is advised that software by itself is given limited patentable weight in apparatus claims because it lacks structure that would be attributed to the apparatus claims.

Claim Objections

Claim 3 is objected to because of the following informalities:

Claim 3 lacks a transitional statement/phrase. MPEP 2111.03 explains that transitional phrases "comprising", and/or "consisting of" define the scope of a claim with

respect to what unrecited additional components or steps, if any, are excluded from the scope of the claim. Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 16-17 and 20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 16, line 11 recites a “means for recognizing”. This wording clearly invokes 112.6^{th,} meaning that the applicant has relied on the specification to interpret the structure that is directed to that "means." Applicant discloses on page 7, lines 15-30 of the specification that the structure associated with “means for recognizing” is either software or an operating mode circuit. In the case where the “means for recognizing” is software, the claims are rejected as indefinite because the written description of the specification discloses no corresponding algorithm. See MPEP 2181.

Also see Patent Office Memo for Rejections under 35 U.S.C. 112, second paragraph, when examining means (or step) plus function claim limitations under 35 U.S.C 112, sixth paragraph:

http://www.uspto.gov/web/offices/pac/dapp/opla/preognotice/section_112_6th_09_02_2008.pdf

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 3, 8, 10-17 and 20-21 are rejected under 35 U.S.C. 102(b) as being anticipated by Hunsaker et al. US Patent Number 5,564,108 (hereinafter Hunsaker).

3. A method of communicating with a medical device, in which an interface is provided to which either measurement means or an external device can be connected and via which measured signals or data are transmitted from the measurement means or the external device to the medical device (Figures 1-2, abstract, column 4, lines 1-24, column 7, lines 7-67, column 8, lines 1-15):

wherein the interface operates in a measurement mode when measurement means are connected and in a communication mode when an external device is connected (Figures 1-2, abstract, column 4, lines 1-24, column 7, lines 7-67, column 8, lines 1-15);

wherein a changeover between measurement mode and communication mode is effected automatically depending on whether the measurement means or the external device are or is connected to the interface (Figures 1-2, abstract, column 4, lines 1-24, column 7, lines 7-67, column 8, lines 1-15); and

wherein:

in the communication mode, a software update is digitally transmitted from a connected external device into the medical device via the interface(Figures 1-2, abstract, column 4, lines 1-24, column 7, lines 7-67, column 8, lines 1-15); and

in the measurement mode, analog signals are transmitted from a sensor into the medical device via the interface (Figures 1-2, abstract, column 4, lines 1-24, column 7, lines 7-67, column 8, lines 1-15).

8. An apparatus for communicating with a medical device, which apparatus comprises

an interface that is designed such that each of an analog measurement means and, a digital external device can be connected to said interface one at a time (Figures 1-2, abstract, column 4, lines 1-24, column 7, lines 7-67, column 8, lines 1-15) and

analog measured signals from the analog measurement means can be received via said interface when the analog measuring means is connected to said interface (Figures 1-2, abstract, column 4, lines 1-24, column 7, lines 7-67, column 8, lines 1-15) and

digital data can be transferred via said interface when the digital external device is connected with said interface (Figures 1-2, abstract, column 4, lines 1-24, column 7, lines 7-67, column 8, lines 1-15).

10. The apparatus as claimed in claim 8, wherein the interface is configured such that it operates in a measurement mode when measurement means are connected and

in a communication mode when an external device is connected (Figures 1-2, abstract, column 4, lines 1-24, column 7, lines 7-67, column 8, lines 1-15).

11. The apparatus as claimed in claim 10 or the medical device as claimed in claim 16, wherein the interface is configured such that in the communication mode a software update can be transmitted from a connected external device into the medical device via the interface (Figures 1-2, abstract, column 4, lines 1-24, column 7, lines 7-67, column 8, lines 1-15).

12. The apparatus as claimed in claim 10, wherein the interface is configured such that a changeover between the measurement mode and the communication mode is effected automatically (Figures 1-2, abstract, column 4, lines 1-24, column 7, lines 7-67, column 8, lines 1-15).

13. The apparatus as claimed in claim 12, wherein software is designed for implementing the changeover automatically, or a switch at the interface or an operating mode circuit in the medical device is provided for causing the changeover automatically (Figures 1-2, abstract, column 4, lines 1-24, column 7, lines 7-67, column 8, lines 1-15).

14. The apparatus as claimed in claim 8, wherein the interface comprises contacts which are used both in a measurement mode and in a communication mode (Figures 1-2, abstract, column 4, lines 1-24, column 7, lines 7-67, column 8, lines 1-15).

15. The apparatus as claimed in claim 14, wherein all contacts required for the communication mode are also used in the measurement mode (Figures 1-2, abstract, column 4, lines 1-24, column 7, lines 7-67, column 8, lines 1-15).

16. A medical device which receives analog data from sensors in a measurement mode and communicates digitally with a digital external device in a communication mode, the medical device comprising (Figures 1-2, abstract, column 4, lines 1-24, column 7, lines 7-67, column 8, lines 1-15):

an interface including:

a set of contacts, the contacts being configured to receive (I) a plug connected by a lead to the analog sensor, and (2) a plug connected by a lead with the digital external device, the contacts being configured such that the contacts can only connect with one of the analog sensor plug and the digital external device plug at a time (Figures 1-2, abstract, column 4, lines 1-24, column 7, lines 7-67, column 8, lines 1-15); and

a means for recognizing whether the contacts are connected with the analog sensor plug or with the digital external device plug and switching the interface between the measurement mode and the communication mode (Figures 1-2, abstract, column 4, lines 1-24, column 7, lines 7-67, column 8, lines 1-15).

17. The medical device as claimed in claim 16, wherein the interface includes:

a switch which assumes one state in response to receiving the analog sensor plug and another state in response to receiving the digital external device plug (Figures 1-2, abstract, column 4, lines 1-24, column 7, lines 7-67, column 8, lines 1-15).

20. The medical device as claimed in claim 16, wherein the recognizing means includes:

a software routine that detects whether digital or analog data is received and which switches the interface into the communication mode when digital signals are received and into the measurement mode when analog signals are received (Figures 1-2, abstract, column 4, lines 1-24, column 7, lines 7-67, column 8, lines 1-15).

21. The medical device as claimed in claim 17, wherein the recognizing means measures electrical parameters of signals received by the interface means and switches between the measurement mode and the communication mode in response to the measured electrical parameters (Figures 1-2, abstract, column 4, lines 1-24, column 7, lines 7-67, column 8, lines 1-15).

Claims 8, 10, 12-17 and 20-21 are rejected under 35 U.S.C. 102(b) as being anticipated by Bell et al. US Patent Number 5,664,270 (hereinafter Bell).

8. An apparatus for communicating with a medical device, which apparatus comprises

an interface that is designed such that each of an analog measurement means and, a digital external device can be connected to said interface one at a time (Column 2, lines 53-67, column 3, lines 1-12, column 10, lines 47-67, column 11, lines 11-53) and

analog measured signals from the analog measurement means can be received via said interface when the analog measuring means is connected to said interface (Column 2, lines 53-67, column 3, lines 1-12, column 10, lines 47-67, column 11, lines 11-53) and

digital data can be transferred via said interface when the digital external device is connected with said interface (Column 2, lines 53-67, column 3, lines 1-12, column 10, lines 47-67, column 11, lines 11-53).

10. The apparatus as claimed in claim 8, wherein the interface is configured such that it operates in a measurement mode when measurement means are connected and in a communication mode when an external device is connected (Column 2, lines 53-67, column 3, lines 1-12, column 10, lines 47-67, column 11, lines 11-53).

12. The apparatus as claimed in claim 10, wherein the interface is configured such that a changeover between the measurement mode and the communication mode is effected automatically (Column 2, lines 53-67, column 3, lines 1-12, column 10, lines 47-67, column 11, lines 11-53).

13. The apparatus as claimed in claim 12, wherein software is designed for implementing the changeover automatically, or a switch at the interface or an operating mode circuit in the medical device is provided for causing the changeover automatically (Column 2, lines 53-67, column 3, lines 1-12, column 10, lines 47-67, column 11, lines 11-53).

14. The apparatus as claimed in claim 8, wherein the interface comprises contacts which are used both in a measurement mode and in a communication mode (Column 2, lines 53-67, column 3, lines 1-12, column 10, lines 47-67, column 11, lines 11-53).

15. The apparatus as claimed in claim 14, wherein all contacts required for the communication mode are also used in the measurement mode (Column 2, lines 53-67, column 3, lines 1-12, column 10, lines 47-67, column 11, lines 11-53).

16. A medical device which receives analog data from sensors in a measurement mode and communicates digitally with a digital external device in a communication mode, the medical device comprising (Column 2, lines 53-67, column 3, lines 1-12, column 10, lines 47-67, column 11, lines 11-53):

an interface including:

a set of contacts, the contacts being configured to receive (I) a plug connected by a lead to the analog sensor, and (2) a plug connected by a lead with the digital external

device, the contacts being configured such that the contacts can only connect with one of the analog sensor plug and the digital external device plug at a time (Column 2, lines 53-67, column 3, lines 1-12, column 10, lines 47-67, column 11, lines 11-53); and

a means for recognizing whether the contacts are connected with the analog sensor plug or with the digital external device plug and switching the interface between the measurement mode and the communication mode (Column 2, lines 53-67, column 3, lines 1-12, column 10, lines 47-67, column 11, lines 11-53).

17. The medical device as claimed in claim 16, wherein the interface includes:

a switch which assumes one state in response to receiving the analog sensor plug and another state in response to receiving the digital external device plug (Column 2, lines 53-67, column 3, lines 1-12, column 10, lines 47-67, column 11, lines 11-53).

20. The medical device as claimed in claim 16, wherein the recognizing means includes:

a software routine that detects whether digital or analog data is received and which switches the interface into the communication mode when digital signals are received and into the measurement mode when analog signals are received (Column 2, lines 53-67, column 3, lines 1-12, column 10, lines 47-67, column 11, lines 11-53).

21. The medical device as claimed in claim 17, wherein the recognizing means measures electrical parameters of signals received by the interface means and switches

between the measurement mode and the communication mode in response to the measured electrical parameters (Column 2, lines 53-67, column 3, lines 1-12, column 10, lines 47-67, column 11, lines 11-53).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bell in view of Hunsaker.

In regards to claim 3, Bell discloses a method of communicating with a medical device, in which an interface is provided to which either measurement means or an external device can be connected and via which measured signals or data are transmitted from the measurement means or the external device to the medical device

(Bell Column 2, lines 53-67, column 3, lines 1-12, column 10, lines 47-67, column 11, lines 11-53):

wherein the interface operates in a measurement mode when measurement means are connected and in a communication mode when an external device is connected (Bell Column 2, lines 53-67, column 3, lines 1-12, column 10, lines 47-67, column 11, lines 11-53);

wherein a changeover between measurement mode and communication mode is effected automatically depending on whether the measurement means or the external device are or is connected to the interface (Bell Column 2, lines 53-67, column 3, lines 1-12, column 10, lines 47-67, column 11, lines 11-53); and

wherein:

in the measurement mode, analog signals are transmitted from a sensor into the medical device via the interface (Bell Column 2, lines 53-67, column 3, lines 1-12, column 10, lines 47-67, column 11, lines 11-53).

Bell does not disclose that in the communication mode, a software update is digitally transmitted from a connected external device into the medical device via the interface. However Hunsaker, a reference in an analogous art, discloses making use of a medical device's existing data collection port (interface) to also load software updates into the device from an external computer wherein circuitry is provided to differentiate between software updates being uploaded and normal monitoring data being received (Hunsaker Figure 1, Abstract). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Bell's method of communicating with a medical

device with Hunsaker's method of using a medical device's existing data collection port (interface) to also load software updates from an external computer because regular software updates are common in the field of medical instrumentation (Hunsaker column 1, lines 15-17) and Hunsaker teaches that using the existing data collection port for software updates saves space on the equipment and is a cost effective way of providing the updates (Hunsaker column 1, lines 49-51, column 2, lines 56-58, column 8, lines 36-39).

Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bell as applied to claim 10 above, and further in view of Hunsaker.

Claim 11 is rejected using substantially the same reasoning applied in the rejection of claim 3 above.

Response to Arguments

Applicant's arguments with respect to claims 3, 8, 10-17 and 20-21 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Applicant's amendment filed on December 13, 2007 necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to SHARICK NAQI whose telephone number is (571)272-3041. The examiner can normally be reached on 8:30 am - 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Henry M. Johnson III can be reached on 571-272-4768. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/S. N./
Examiner, Art Unit 3769

/Michael C. Astorino/
Primary Examiner, Art Unit 3769

November 7, 2008.